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Regional Environmental Monitoring and Assessment Program: Solicitation for Projects in EPA Regions 3, 4, and 6 and 7.

General Information

Announcement Type:	Initial Announcement
Funding Instrument Type:	CA
Funding Opportunity Number:	EPA/ORD/NHEERL/MED-FY2006-06-25911
Posted Date:	(04/05/06)
Original Due Date for Applications:	To be considered timely, printed applications must be received by 3:00 p.m. local time in Duluth, MN on (06/13/2006) from the U.S. Postal Service, or other commercial delivery service. Applications submitted electronically through grants.gov must be received by grants.gov by 6:00 p.m. EST on (06/13/2006)
Current Due Date for Applications:	To be considered timely, printed applications must be received by 3:00 p.m. local time in Duluth, MN on (06/13/2006) from the U.S. Postal Service, or other commercial delivery service. Applications submitted electronically through grants.gov must be received by grants.gov by 6:00 p.m. EST on (06/13/2006)
Archive Date:	(To be completed by Grants.gov)
Category of Funding Activity:	Environment
Anticipated Number of Awards:	5
Anticipated Total Program Funding:	\$ 2,404,000
Award Ceiling:	\$ 192,000 (Year One, with up to \$192,000 per year)
Award Floor:	\$ 75,000 (Year One)
CFDA Number:	66.512 REMAP
Cost Sharing or Matching Requirement:	None

Eligible Applicants

Entities that are eligible to receive federal assistance under the Clean Water Act which includes the States, their territories and possessions, local governments and federally recognized U.S. Tribal Nations (40 CFR part 31); institutions of higher education, hospitals, and other non-profit organizations (40 CFR part 30). Eligible nonprofit organizations include any organizations that meet the definition of nonprofit in OMB Circular A-122. However, non-profit organizations described in Section 501(c)(4) of the Internal Revenue

Code that engage in lobbying activities, as defined in Section 3 of the Lobbying Disclosure Act of 1995, are not eligible to apply. Universities and educational institutions must be subject to OMB Circular A-21.

Federal Agency Name

U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Mid-Continent Ecology Division
Attn: Jo Thompson, 6201 Congdon Boulevard, Duluth, MN 55804

Description

The purpose of the solicited research is to provide States and Tribes with methods and approaches for incorporating statistically valid ecological monitoring data into their environmental decision making. For the 2006 solicitation, EPA is seeking proposals which meet specific priority needs within EPA's Regions 3, 4, 6, and 7. These include:

- The use of probabilistic monitoring to develop a Fish Index of Biotic Integrity (IBI) as an indicator of biological condition in large warm water streams of Pennsylvania's Atlantic slope. (Region 3)
- Monitoring and Assessment of Wetlands in the Mid-Atlantic States of Region 3 using a stratified, statistically-valid sample survey design that will allow extrapolation of wetland condition throughout ecological regions of the Mid-Atlantic.
- Assessment of the extent, condition and environmental significance of headwater streams in the Appalachian eco-regions at risk from mountaintop surface coal mining operations. (Region 4)
- The use of a probabilistic approach to answer questions about the condition and fate of geographically isolated wetlands in coastal plain regions of the southeast in Region 4.
- The use of a probabilistic design to assess the condition of streams in the Western Gulf Plains Eco-region of Louisiana that will facilitate the refinement of existing aquatic life use categories and water quality criteria. (Region 6)
- Using a probabilistic sample design approach to assess the condition of the major large tributaries of the Missouri and Mississippi Rivers in Region 7.
- The use of a probabilistic design to assess and characterize fish tissue contamination in water bodies, especially lakes, in Region 7.

Application Materials

You may submit either a printed application or an electronic application for this announcement. The printed application must be submitted to Jo Thompson, U.S. EPA MED, 6201 Congdon Blvd, Duluth, MN 55804, by the closing date and time. To apply electronically, the electronic application package available through the <http://www.grants.gov/> web site must be used. If your organization is not currently registered with Grants.gov, you will need to allow approximately one week or longer to complete the registration process. This registration, and electronic submission of your application, must be completed by an Authorizing Organization Representative.

Agency Contact Person for Electronic Access Problem

Jo Thompson, phone: (218) 529-5198 email: Thompson.jo@epa.gov

Link to Full Announcement

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FULL TEXT OF ANNOUNCEMENT

I. Funding Opportunity Description

Title of Assistance Opportunity: Regional Environmental Monitoring and Assessment Program: Solicitation for Research Projects in EPA Regions 3, 4, and 6 and 7

Background: The Regional Environmental Monitoring and Assessment Program (REMAP) is a partnership between the EPA Regional Offices and the Office of Research and Development (ORD) Environmental Monitoring and Assessment Program (EMAP), with the primary goal to build state and tribal capacity for using statistically valid monitoring data for reporting on the condition of their aquatic resources. The goals for REMAP are to transfer EMAP's latest scientific techniques for ecological monitoring to EPA Regions, States, Tribes and local decision makers. ORD works with the EPA Regional Offices to support projects meeting EMAP criteria and that are of importance to needs within the Regions. EMAP support for these projects includes: contributing to development of the scientific design of projects; assistance with the selection and evaluation of appropriate indicators and methods for measurement; application of information management approaches; analysis and interpretation of data; and providing a source of funding. EPA funds projects in each of its 10 Regions. Projects are normally funded for up to 2 years, but longer projects are occasionally supported. Annual announcements reflect priority needs in those Regions where funding will be allocated for new projects. For this year, EPA is seeking proposals for projects in Regions 3 (PA, WV, VA, DE, MD, DC), 4 (KY, TN NC, SC, MS, AL, GA, FL), 6 (NM, TX, OK, AR, LA) and 7 (IA, NE, KS, MO) to address needs within each of those Regions.

Government Performance Results Act (GPRA) Goals: Projects conducted under this program must advance the following goals/objectives as identified in EPA's Strategic Plan (<http://www.epa.gov/ocfo/plan/2003sp.pdf>):

Goal 4: Healthy Communities and Ecosystems;

Objective 4.4: Enhance Science and Research.- provide a sound scientific foundation for EPA's goal of protecting, sustaining, and restoring the health of people, communities, and ecosystems by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 4.

Sub-objective 4.4.1 Apply the Best Available Science.- identify and synthesize the best available scientific information, models, methods and analyses to support Agency guidance and policy decisions related to the health of people, communities, and ecosystems.

Sub-objective 4.4.2 Conduct Relevant Research.-conduct research that contributes to the overall health of people, communities, and ecosystems.Assistance

Statutory Authority for Award of Assistance: Statutory Authority for Award of Assistance: Research will be funded under the statutory authority of the Clean Water Act (P.L.92-500, as amended) Section 104(b3).

Environmental Results: Pursuant to EPA Order 5700.7, “*Environmental Results under EPA Assistance Agreements*,” EPA requires that all grant and cooperative agreement recipients adequately address environmental outputs and outcomes. Outputs and outcomes differ both in their nature, and in how they are measured.

- **Outputs:** The term “output” means an environmental activity, effort, and/or associated work products related to an environmental goal and objective, that will be produced or provided over a period of time or by a specified date. Outputs may be quantitative or qualitative but must be measurable during an assistance agreement funding period.
- **Outcomes:** The term “outcome” means the result, effect or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be environmental, behavioral, health-related or programmatic in nature, but must be quantitative. They may not necessarily be achievable within an assistance agreement funding period.

Project outputs and outcomes should be consistent with the U.S. EPA’s strategic plan (www.epa.gov/ocfopage/plan/plan.htm) and research priorities. In general, the expected outcomes supported by this Assistance Agreement will be the strengthened ability to assess and compare risks to ecosystems, to protect or restore them, and to track progress in terms of ecological outcomes. Expected Outputs delivered by this assistance agreement are to be consistent with EPA’s long term research goals for Ecosystem Protection. In general, these include, but are not limited to:

- Products that provide environmental managers and researchers with a better understanding of the links between human activities, natural dynamics, ecological stressors and ecosystem condition.
- Tools that managers and researchers can use to predict stressors on ecological resources.
- Scientifically defensible methods for protecting and restoring ecosystem condition.

More specific outputs and outcomes will depend on the research project.

Funding Priorities/Focus: The primary objectives of the solicited research are to provide States and Tribes with methods and approaches for incorporating statistically valid ecological monitoring data into their environmental decision-making process. Project goals are to be consistent with EMAP’s probabilistic approach (www.epa.gov/emap) to answer questions about ecological conditions at regional and local levels. Information produced from projects is to be transferable to Regional, State and Tribal water quality monitoring programs and regulatory agencies. Research proposals must address one or more of the following monitoring needs in U.S. EPA Regions 3, 4, 6, and 7 for state and tribal aquatic (headwater streams, lakes, near shore coastal areas, wetlands, wadeable streams or large rivers) resources:

- State and Tribal monitoring needs for water quality reporting (CWA Section 305b).
- Information needed for identifying impaired waters (CWA Section 303d).
- Using probability information to identify the effectiveness of restoration/remediation efforts.
- Advancing the science of biological reference condition for establishing biocriteria.
- Improved tools and approaches for the assessment of aquatic ecosystems.

Any proposals submitted must at the least address the above monitoring needs. In addition, proposals which address specific (see below) “Regional Funding Priorities” will be given greater consideration (see programmatic selection criteria in Section V). These priorities have been identified by ORD and the Regions as priority areas needing research in order to meet the monitoring needs stated above.

Regional Funding Priorities

EPA Region 3:

The use of probabilistic monitoring to develop a Fish Index of Biotic Integrity (IBI) as an indicator of biological condition in large warm water streams of Pennsylvania’s Atlantic slope. PA’s water quality monitoring program has relied on benthic macro-invertebrate protocols to conduct aquatic life use assessments for most of the state’s wadeable streams. These methods, however, are not well suited for assessment of larger, warm water streams. A Fish Index of Biotic Integrity (IBI) is an assessment protocol that is better suited to these types of streams. The PA Department of Environmental Protection (DEP) has already developed a preliminary fish IBI for large wadeable warm water streams in Pennsylvania’s portion of the upper Ohio River Basin. This fish IBI has not been verified with an independent data set. EPA is seeking proposals to verify that the existing preliminary Ohio River basin fish IBI developed by DEP is sufficient for large warm water streams and for the further development of a fish IBI for the Atlantic Slope (Susquehanna and Delaware Rivers) basins. The outputs of this study will be a verified fish IBI which will be a valuable bioassessment tool for Pennsylvania and will be complementary to the existing benthic macroinvertebrate protocols and an assessment of condition of the Ohio, Susquehanna and Delaware basin warm water streams based on fish communities. The environmental outcomes of this research will be the strengthened ability to assess condition across a wide range of streams in the State and a baseline of biological condition for which to track changes and to set protection and restoration goals.

Monitoring and Assessment of Wetlands in the Mid-Atlantic States of Region 3 using a stratified, statistically-valid sample survey design that will allow extrapolation of wetland condition throughout ecological regions of the Mid-Atlantic. Wetland condition and wetland water quality issues have been at the forefront of Clean Water Activities over the past several years. The establishment of comprehensive State and Tribal wetlands programs is a national priority. In response to the need for consistency and scientifically sound State monitoring programs, many federal and state workgroups have been exploring and developing assessment methodologies. In the Mid-Atlantic, 9 states, including all of

Regions 3 states, have formed the Mid-Atlantic Wetland Workgroup (MAWWG) to develop goals and standardized approaches for wetland assessment in the ecological regions of the mid-Atlantic. EPA is seeking proposals for a wetlands monitoring and assessment pilot in Region 3 using a stratified, statistically-valid sample survey design that will allow extrapolation of wetland condition through out ecological regions of the Mid-Atlantic in Region 3. Outputs of this project will provide documented tests of standardized methods and approaches for wetland assessment in the Mid Atlantic States and a framework for the assessment of wetlands of the entire Mid-Atlantic Region. The outcomes of this research will be the strengthened capacity of the states to perform wetland monitoring in the Mid-Atlantic Region, and provide the foundation for assessing the condition of these wetlands in terms of tracking changes, and setting protection and restoration goals.

EPA Region 4:

Assessment of the extent, condition and environmental significance of headwater streams in the Appalachian eco-regions at risk from mountaintop surface coal mining operations. The Clean Water Act requires that states report on and protect all bodies of water. Yet, most surveys have focused on 2nd order or larger streams, while headwater streams, which provide important ecosystem functions and make up the larger proportion of our nation's stream network, are under assessed nationwide. Many of these ecosystems have been destroyed by agriculture and other human activities. And in Region 4, mountaintop surface coal mining operations (MTM), which are frequently authorized under the Clean Water Act Section 404 program, have been identified as having a large impact on these systems. In the steep slopes of the Eastern Kentucky coalfields the operations generate large volumes of excess soil and rock that are placed into adjacent valleys and "head-of-hollows." The discharge of fill material buries headwater streams, springs, seeps, wadable streams, and wetlands in the valley bottoms. The U.S. Office of Surface Mining conducted an assessment of valley fill impacts in the Appalachian coal fields. They found that over 330 miles of streams in eastern Kentucky were permanently buried by valley fills between 1985 and 1999, including approximately 190 miles of perennial streams. These numbers may be optimistic, however, since research indicates that the extent of headwater streams is often underestimated on maps and in hydrologic databases. In addition, little data is available to assess the extent and magnitude of the impact of these fills on downstream waters. Region 4 has identified the assessment of these headwater streams as their primary priority for REMAP funding for this year. EPA is seeking proposals for a probabilistic assessment which will identify the extent of the headwater streams in this eco-region and help answer questions on how headwater streams influence the condition on downstream resources and the potential cumulative effects of disturbed headwaters on downstream resources. ORD has begun efforts to develop tools for identifying headwater stream resources and will assist with sampling design issues of this project. Research results should address the accuracy of using existing geospatial datasets to identify the extent of headwater streams and determine the ability of advanced remote sensing datasets such as LiDAR, ASTER, or geospatial statistical models to improve that accuracy. Anticipated outputs of this research will provide the states with the ability to extrapolate

site specific information over broad areas with a known level of confidence and will contribute to a national effort to accurately identify the condition and characterization of designated use of headwater streams by locality including the support that they provide to downstream uses. The outputs of the research will provide methods and approaches for identifying the extent of headwater streams. Outputs will also provide an assessment of the condition of existing headwater streams, document the importance of headwater streams to downstream waters, and will identify geographical areas where MTM operations are likely to cause significant water quality impacts to downstream waters. Outcomes of this research will strengthen the ability to evaluate the importance and condition of headwater streams throughout the Eastern States and will strengthen the ability to make sound management decisions for the protection of these systems and for the ecosystem services they provide.

The use of a probabilistic approach to answer questions about the condition and fate of geographically isolated wetlands in coastal plain regions of the Southeast in Region 4. The use of a probabilistic approach to answer questions about the condition and fate of geographically isolated wetlands in coastal plain regions of the Southeast in Region 4. Isolated wetlands are vulnerable waters that perform many services benefiting both human health and proper ecosystem functioning, including pollutant sorption, flood water attenuation and ground water recharge, and habitat support. However, many geographically isolated wetlands located in coastal plain regions of the southeast also are at significant risk of being destroyed or degraded by certain agricultural practices and by urbanization. The situation is complicated by the complexity Clean Water Act jurisdiction over the resource class. The EPA Office of Wetlands, Oceans, and Watersheds has identified both understanding the ecological importance of isolated wetlands and the development of monitoring tools for isolated wetlands as priority research needs. EPA is seeking proposals for research to help answer four critical questions related to isolated wetlands: 1) How accurate are existing geospatial datasets in delimiting southeastern coastal plain isolated wetlands of varying sizes, wetland types, and in differing landscape matrices, and how can that accuracy be improved using existing advanced remote sensing datasets such as LiDAR, ASTER, or geospatial statistical models? What is the accurate extent of the isolated wetland resource? 2) What is the rate of destruction or extent modification for these systems? How many and at what rate have these systems been converted, modified, or destroyed? 3) What is the pollutant absorption capacity of isolated wetlands of various types, sizes, and condition, and how does isolated wetland extent and quality (condition) influence the quality of downstream receiving waters? and 4) What are the potential cumulative effects of degraded or destroyed isolated wetlands on downstream aquatic resources, including hydrologic characteristics and functioning? Proposals are to be developed using a probabilistic sampling design to extrapolate site specific information over broad areas with a known level of confidence, and should focus within basins selected in consultation with regional scientists. Outputs of this research will provide baseline data and tools for the reliable assessment of isolated wetland location and extent and provide an understanding of the ecological benefits of isolated wetlands. Outcomes of this research will strengthen the ability to evaluate the condition of these resources and to enhance management decisions for their protection and their importance for downstream systems.

EPA Region 6:

The use of a probabilistic design to assess the condition of streams in the Western Gulf plains eco-region of Louisiana that will facilitate the refinement of existing aquatic life use categories and water quality criteria . Existing numeric water quality criteria for dissolved oxygen in Louisiana may not be attainable even in the highest quality waters in the Western Gulf plains eco-region. Furthermore, existing aquatic life use categories may be too broad to provide a framework for the development of biological assessment methods and criteria. The Louisiana Department of Environmental Quality has conducted use attainability analysis for specific sites in Louisiana, but there exists a need for the appropriate identification of reference waters, development of regional criteria and further development of biological metrics as related to water-body classification. In support of this need, EPA has developed a probabilistic sampling design for this eco-region and USGS is collecting physical habitat, water quality and macro-invertebrate data from 30 probabilistic sites and five additional targeted candidate reference sites. USGS is also deploying continuously recording multi-parameter probes for 48-hour periods to characterize diel changes at nine of the highest quality sites, under late summer low flow conditions. EPA is seeking proposals to conduct biological assessments (especially fish and periphyton) of streams in this eco-region, to analyze data (including that collected by USGS), to identify reference sites and important water-body classification factors, develop models in support of refining existing aquatic life use categories and to develop more appropriate water quality standards. Outputs of this study will identify biological and water quality conditions of streams in the Western Gulf Plains Ecoregion of Louisiana, provide a assessment of the condition of these streams, and identify appropriate aquatic life use and water quality criteria for these systems. Outcomes of this study will strengthen Louisiana's ability to set appropriate biological and water quality goals for the Western Gulf Plains Eco-region streams. Outcomes will also provide a statistically valid approach to determine the condition of these streams, for tracking changes and for management decisions in terms of protection and restoration efforts.

EPA Region 7.

Using a probabilistic sample design approach to assess the condition of the major large tributaries of the Missouri and Mississippi Rivers in Region 7. State assessments of major tributaries to the Missouri and Mississippi Rivers are problematic because methods and designs for sampling these systems are not well tested. Although states often omit or inadequately address great rivers in their comprehensive water quality assessments, non-wadeable tributaries to great rivers are usually characterized using methods and measures which might not accurately capture their condition. Indices used to identify impaired condition among classes of wadeable streams based on reference conditions are often not relied on by states in their evaluation of non-wadeable stream condition. In addition, evaluation and assessment frameworks for physical and chemical information traditionally applied to wadeable streams have questionable applicability to large stream systems given the abundance of different habitats and the sheer size of these lotic systems. Large tributary rivers provide a transition between wadeable streams and Great Rivers in which

biological, physical and chemical conditions somewhat reflect both lotic systems. This is particularly evident near the confluence zones of these tributaries with the Great Rivers where the biological community includes species from both Wadeable and non-Wadeable environments. EPA has developed and implemented methods for sampling Wadeable and non-Wadeable streams, and for Great Rivers like the Missouri and Mississippi Rivers (www.epa.gov/emap/greatriver/index.html). It is likely that a combination of Great River and non-Wadeable stream methods will prove suitable for these systems. EPA is seeking proposals for conducting a biological assessment of the lower reaches and main stem confluence areas of the major tributaries of the Mississippi and Missouri Rivers in EPA Region 7 (Nebraska, Iowa, Kansas, and Missouri). The outputs of this research will provide the States with statistically valid assessment information which will include multiple abiotic (e.g., habitat, water quality) and biotic indicators (e.g., fish, algae, macroinvertebrates, plankton). The outputs will also provide the States with an approach to determining reference expectations and methods for assessing the condition of these rivers. The outcomes of this research will strengthen the ability to conduct reliable and accurate assessments of these systems for reports on condition of these resources (305b) and to collect appropriate information for 303d listing process. Outcomes will provide the knowledge base for tracking changes to these systems and provide information for management decisions concerning protection, restoration efforts and their effects on the main stem rivers.

The use of a probabilistic design to assess and characterize fish tissue contamination in water bodies, especially lakes, in Region 7. In conjunction with its states, EPA Region 7 has collected fish tissue since the early 1980s under the Region 7 Ambient Fish Tissue Monitoring (RAFTM) Program. The primary goals of the program are to measure contaminant levels in the environment (through fish tissue) and to assess the health risks to humans from consuming contaminated fish. A secondary goal of the program is to identify possible risks to piscivorous wildlife from consuming contaminated fish. Although EPA has conducted a national lakes freshwater fish contamination survey to estimate the national distribution of selected persistent, bioaccumulative and toxic chemical residues in fish tissue from lakes and reservoirs in the lower 48 states (website), the survey did not serve to meet the objects of the RAFTM program. Region 7 and its states have identified an existing need to provide comprehensive sampling coverage for all water-body classes which are significant fishing resources in Region 7, especially small lakes (and some other classes) which are currently either not sampled or under-sampled for the current program. In response to this need, Region 7 along with state partners, have updated a plan for the RAFTM program (Copies of this plan are available through Lyle Cowles, U.S. EPA Region 7). The plan addresses a set of complimentary, water-body class-specific monitoring designs for this redesigned program. The monitoring designs are intended to provide representative coverage for each class and include use of probabilistic and other type of designs such as census and targeted-representative, but are also intended to be complementary to allow aggregating across different resource classes to provide a Regional-level multi-class assessment of fish tissue. EPA is seeking proposals to implement these monitoring designs for the sampling and assessment of fish tissue contaminants for this program. The outputs of this study will provide the states with

methods and approaches for characterizing contaminant levels in fish tissue and provide fish-tissue contamination information for the resource class targeted by the project. Outcomes of this study will strengthen States ability to provide information about the health risks from consuming fish in the Region. Outcomes will also enhance the ability of States to statistically detect changes in fish tissue contamination over time.

II. Award Information

Anticipated Amount of Individual Awards: \$192,000 to \$975,000 (may be incrementally funded)

Anticipated Number of Awards: 5

Anticipated Funding: Up to a total of \$2,404,000 is expected to be awarded across the 4 Regions. However, only \$868,000 is available in FY2006 for new REMAP projects. We expect to make 2 awards in Region 3 and 1 in each of Regions 4, 6, and 7. Awards may be made in full or in increments at the discretion of EPA and is dependent on the timing and amount of future EPA appropriations and allocations to the REMAP program. Projects are typically funded for 2 years with annual increments of \$192,000 per year. However, for the specific **Regional Funding Priorities** identified in Section I, the Regions have determined the following funding ceilings and project periods:

- 1). Region 3: The use of probabilistic monitoring to develop a Fish IBI as an indicator of biological condition in large warm water streams of Pennsylvania's Atlantic slope. The maximum total funding will be \$192,000 with a 1-2 year project period.
- 2). Region 3: Monitoring and Assessment of wetlands in the Mid-Atlantic states of Region 3 using a stratified, statistically-valid sample survey design that will allow extrapolation of wetland condition throughout ecological regions of the Mid-Atlantic. The maximum funding will be \$192,000 per year for up to 5 years. Funding will be available in annual increments and will depend on availability of funds and completion of activities and status of deliverables
- 3). Region 4: Assessment of the extent, condition and environmental significance of headwater streams in the Appalachian eco-regions at risk from mountaintop surface coal mining operations. Or, The use of a probabilistic approach to answer questions about the condition and fate of geographically isolated wetlands in coastal plain regions of the southeast in Region 4. The maximum total funding will be \$484,000. Proposals with project periods of up to 3 years will be considered. Only one proposal for Region 4 will be selected.
- 4). Region 6: The use of a probabilistic design to assess the condition of streams in the Western

Gulf plains eco-region of Louisiana that will facilitate the refinement of existing aquatic life use categories and water quality criteria. The maximum funding is \$384,000 for a project period of up to 2 years. Only one proposal for Region 6 will be selected.

5). Region 7: Using a probabilistic sample design approach to assess the condition of the major large tributaries of the Missouri and Mississippi Rivers in Region 7. Or, The use of a probabilistic design to assess and characterize fish tissue contamination in water bodies, especially lakes, in Region 7. The maximum funding is \$384,000 for a project period of up to 2 years. Only one proposal for Region 7 will be selected.

EPA reserves the right to partially fund proposals/applications by funding discrete activities, portions, or phases of proposed projects. If EPA decides to partially fund a project, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the proposal/application, or portion thereof, was evaluated and selected for award, and that maintains the integrity of the competition and selection process. Furthermore, EPA reserves the right to reject any or all proposals or applications and make no awards.

Anticipated Project Period: It is anticipated that project periods will vary between Regions and projects (see previous section). The start of individual projects will vary depending upon completion of funding packages (see section V) and date of award by the Grants Administration Division. The earliest start date is anticipated to be on or about October 1, 2006.

Type of Award: The Agency anticipates the award of cooperative agreements.

Anticipated Federal Involvement: EPA anticipates substantial involvement with in the implementation of the research. This involvement could include:

1. Contributing to development of the probabilistic sampling design of projects.
2. Provide assistance with selection and evaluation of appropriate indicators and methods for measurement, field training, and logistical support as requested by applicants.
3. Provide other In-kind assistance such as equipment and analytical services if it is more efficient in terms of cost or time.
4. Provide assistance on application of information management approaches and analysis and interpretation of data.
5. Participate in the development and preparation of journal articles on these activities.

III. Eligibility Information

Eligible Applicants: Entities that are eligible to receive federal assistance under the Clean Water Act which includes the States, their territories and possessions, local governments and federally recognized U.S. Tribal Nations (40 CFR part 31); institutions of higher education, hospitals, and other non-profit organizations (40 CFR part 30). Eligible nonprofit organizations include any organizations that meet the definition of nonprofit in OMB Circular A-122. Nonprofit applicants that are recommended for funding will be subject to pre-award administrative capability reviews consistent with Sections 8.b, 8.c, and 9.d of EPA Order 5700.8. Non-profit organizations described in Section

501(c)(4) of the Internal Revenue Code that engage in lobbying activities, as defined in Section 3 of the Lobbying Disclosure Act of 1995, are not eligible to apply. Universities and educational institutions must be subject to OMB Circular A-21.

Cost Sharing Requirements: Institutional cost-sharing is not required. However, if the applicant intends to cost-share, a brief statement concerning cost-sharing should be added to the budget justification, and estimated dollar amounts must be included in the appropriate categories in the budget table.

Sub-agreement Eligibility Criteria: If two or more eligible organizations (40 CFR part 30 and 31) wish to form a consortium in response to this RFA, they must submit a single application for this assistance agreement. Consortia must identify which eligible organization will be the recipient of the assistance agreement, and which eligible organizations(s) will be sub-awardees of the recipient. Sub-awards must be consistent with the definition of that term in 40 CFR 30.2(ff). The recipient must administer the assistance agreement, is accountable to EPA for proper expenditure of the funds, and will be the point of contact for the coalition. As provided in 40 CFR 30.2(gg), sub-recipients are accountable to the recipient for proper use of EPA funding. Consortia may not include for-profit organizations that will provide services or products to the successful applicant. For-profit organizations are not eligible for sub-awards. Any contracts for services or products funded with EPA financial assistance must be awarded under the competitive procurement procedures of 40 CFR Part 30 and 31. Applicants are not required to identify contractors or consultants in the proposal. Moreover, the fact that a successful applicant has named a specific contractor or consultant in the proposal EPA approves does not relieve it of its obligations to comply with competitive procurement requirements.

Threshold Criteria:

1. Applications will be rejected which do not incorporate a probabilistic sampling design, address State and/or Tribal aquatic monitoring needs and consider one or more of the following:
 - State and Tribal monitoring needs for water quality reporting (CWA Section 0305b).
 - Information needed for identifying impaired waters (CWA Section 303d).
 - Using probability information to identify the effectiveness of restoration/remediation efforts.
 - Advancing the science of biological reference condition for establishing biocriteria.
 - Improved tools and approaches for the assessment of aquatic ecosystems.
2. Applications will be rejected if the proposed projects are not within the States, U.S. possessions or Tribal lands of EPA's Regions 3, 4, 6 or 7.
3. Applications must substantially comply with the application submission instructions and requirements set forth in Section IV of this announcement or else they will be rejected. Applications must be received by the EPA or through www.grants.gov on or before the solicitation closing date published in Section IV of this announcement. Applications received after the published closing date will be returned to the sender without further consideration

IV. Application and Submission Information

Applicants must submit a full, detailed application to include all of the documents described in Section A below. ***Applications that do not substantially comply will be rejected.*** Applicants should submit adequate information addressing each of the ranking criteria in Section V. Additional guidance on completing the documents is available at EPA's Office of Grants and Debarment (<http://www.epa.gov/ogd/>). Applicants may submit either a printed application or an electronic application through www.grants.gov for this announcement. Applications may not be submitted via email or by fax. Applications submitted by email or fax will not be considered for selection. Instructions for both forms of submission follow.

A. Application Materials

The application is made through submission of the materials described below for both electronic and printed applications. The application must contain the following items:

- 1. Application For Federal Assistance (SF-424).** This form will be the *first page* of the application. Instructions for completion of the SF-424 are included with the form. Complete the form. There are no attachments. The form must contain the original signature of an authorized representative of the applying institution. Please note that both the Principal Investigator and an administrative contact are to be identified in Section 5 of the SF424. Please be sure to include organization fax number and email address in Block 5 of the Standard Form SF 424. Please note that the organizational Dun and Bradstreet (D&B) Data Universal Number System (DUNS) number must be included on the SF-424. Organizations may obtain a DUNS number at no cost by calling the toll-free DUNS number request line at 1-866-705-5711.
- 2. Budget Information for Non-Construction Programs (SF-424A).** Complete the form. There are no attachments. The total amount of federal funding requested for the project period should be shown on line 5(e) and on line 6(k) of SF-424A. If indirect costs are included, the amount of indirect costs should be entered on line 6(j). The indirect cost rate (i.e., a percentage), the base (e.g., personnel costs and fringe benefits), and the amount should also be indicated on line 22. Budget information must be broken down by each year of the project
- 3. SF-424B, Assurances for Non Construction Programs.** Complete the form. There are no attachments.
- 4. Grants. Gov Lobbying Form-Certificate Regarding Lobbying.** Complete the form. There are no attachments.
- 5. EPA Form 5700-54, Key Contacts Form** should include the Principal, Co-Investigators, and administrative contacts. A copy of this form should also be completed for major sub-agreements (contacts at the institutions of primary co-investigators).

6. EPA Form 4700-4, Pre-Award Compliance Review Report. Complete the form. There are no attachments.

7. Project Narrative and Supporting Documentation.

The Project Narrative is the technical proposal that discusses the technical approach and organizational capabilities for accomplishing the goals stated under the Funding Priorities/Focus in Section I. It will become the technical work plan for selected proposals. It describes the objective of the proposed project and its link to EPA's strategic plan. Pages should be consecutively numbered (bottom center) on 8.5X11-inch pages of single-spaced, standard 12-point type with 1-inch margins. Narratives shall include all supportive text, tables, figures, and references. There are no page limitations, but brevity is encouraged and expected. The document should be readable in PDF, MS Word or Word Perfect WP6/7/8 for Windows and consolidated into a single file. The project narrative shall contain the following sections and information:

- A. *Title Page.* Include the title of the proposed project, the organization submitting the proposal, the principal investigator(s) with address, phone number and email address and other contact information if different than the PI. Also include the EPA Region for which the proposal is intended.
- B. *Table of Contents.*
- C. *Project Description.* Brief discussion (1-2 paragraphs) of the purpose, rationale and importance of the research to be conducted. Identify region and resource population being sampled or targeted and discussion about how the outputs (products) of this project will be linked to real environmental outcomes.
- D. *Background.* State the problem. Incorporate existing literature.
- E. *Project Objectives.* Specify questions/hypotheses that the research will address. Describe how this research is consistent with EPA's strategic plan.
- F. *Technical Approach.*
 - a. *Overview of Approach.* Include activities and measurements that will be needed to address the objectives of the proposed research.
 - b. *Statistical design.* Identify target population, site selection criteria and sample size required to meet research objectives.
 - c. *Existing data.* Identify sources and information about existing data, including land cover data, and how it will be used in the research.
 - d. *Sampling and Analytical procedures and protocols.* Identify criteria used to select field and laboratory methods, description of the logistics for the field

work, including choosing, training and deployment of field crews, and the approach for evaluating the efficacy of the methods. Include (in the Appendices) copies of proposed analytical and field methods (If methods are established EPA EMAP methods or standard analytical methods, cite in references only).

- e. Data qualifications. Specify precision, accuracy, completeness, representativeness, and comparability of data required to meet objectives.
 - f. Data reduction, validation, management and reporting procedures. Include discussion on how data are to be managed, validated, and analyzed. It will also describe how the data and metadata files will be made available to EPA and State and Tribal stakeholders.
- G. *Schedule, Milestones, Products and Final Reports.* Include sampling schedules, schedules for data analysis, reports, workshops, etc. Break down project activities and deliverables for each year of anticipated funding. Identify specific anticipated environmental outputs (e.g. Demonstration of a probabilistic design for sampling MAH wetlands) and associated outcomes (e.g. Providing MAH states with statistically valid methods for determining the condition of wetlands) and include a plan for tracking and measuring the success in achieving the same.
- H. *Personnel Qualifications, Project Management Structure, Personnel Time Commitments, and Personnel Responsibilities.* Identify roles and responsibilities of personnel and expertise for the research to be undertaken. Include citations of relevant manuscripts, reports, etc. produced by the proposed key personnel under other similar projects that would demonstrate their expertise, experience and knowledge of the proposed research. Include partners and collaborators.
- I. *Plan for tracking and measuring progress* toward achieving the expected outputs and outcomes identified in Section I of the announcement. See EPA order 5700.7 (<http://www.epa.gov/ogd/grants/award/5700.7.pdf>).
- J. *List documenting Environmental Results Past Performance.* Submit a list of all EPA and other Federal agency assistance agreements that your organization performed in the last three years, and describe how you documented and/or reported on whether you were making progress towards achieving the expected results (e.g., outputs and outcomes) under those agreements. If you were not making progress, please indicate whether, and how, you documented why not. In evaluating applicants under this factor in Section V, EPA will consider the information provided by the applicant and may also consider relevant information from other sources, including information from EPA files and from current and prior Federal agency grantors (e.g., to verify and/or supplement the information provided by applicants). If you do not have any past performance information please indicate this in the proposal.

- K. List documenting Programmatic Capability.* Submit a list of all federally funded agreements similar in size, scope and relevance to the proposed project that your organization performed within the last three years and describe how you were (1) technically able to successfully carry out and manage those agreements and (2) your history of meeting the reporting requirements under those agreements including submitting acceptable final technical reports. In evaluating applicants, under this factor in Section V, EPA will consider the information provided by the applicant and may also consider relevant information from other sources, including information from EPA files and from current and prior Federal agency grantors. (e.g, to verify and/or supplement the information provided by applicants). If you do not have such information, indicate this in the proposal. In addition, provide information on your organizational experience and plan for timely and successfully achieving the objectives of the proposed project and your staff expertise/qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the proposed project.
- L. Biographical Sketches.* A 2-page curriculum vitae should be included for the Principal Investigator and any other key personnel identified in the proposal.
- M. References.*
- N. Appendices.*

8. A Budget Narrative which includes detailed, itemized budget estimates for the project and is broken down into direct labor, fringe benefits, contractual and sub-agreement costs, equipment, travel, other direct costs and overhead with summaries for each year and the total for the entire project. If a sub-agreement is included in the application, provide a separate budget for the sub-agreement in the same format if the sub-agreement is greater than \$25k.

If amounts are budgeted for subcontracts, provide a description of the work that will be subcontracted and an explanation of why it must be subcontracted. Indicate whether the subcontracts will be awarded competitively or if not, what justification exists to make a non-competitive award. Any budget that includes amounts for subcontracts of 40% or more of the total direct costs will be subject to special review. Refer to Section III, Sub-agreement Eligibility Criteria, for a further discussion of proposed subcontracts.

Please note that institutional cost-sharing (In-Kind) is not required. However, if you intend to cost-share, a brief statement concerning cost-sharing should be added to the budget justification, and estimated dollar amounts must be included in the appropriate categories in the budget table.

Describe the basis for calculating the personnel, fringe benefits, travel, equipment, supplies, contractual support, and other costs identified in the itemized budget and explain the basis for their calculation. (Special attention should be given to explaining the “travel,” “equipment,” and “other” categories.). For any proposed equipment, identify any tangible non-expendable

personal property to be purchased which has an estimated cost of \$5,000 or more per unit and a useful life of more than one year. (Personal property items with a unit cost of less than \$5,000 are considered supplies.)

9. SF-LLL, Disclosure of Lobbying Activities (required if your organization is involved in lobbying). Complete the form if your organization is involved in lobbying activities.

10. Negotiated Indirect Cost Rate Agreement (if indirect costs are included in the project budget). Attach a copy of your organization's Indirect Cost Rate Agreement, if applicable. You must submit a copy of your organization's Indirect Cost Rate Agreement as part of the application package if your proposed budget includes indirect costs.

B. Submission Instructions for Electronic Applications

The electronic application package available through the <http://www.grants.gov/> web site must be used for electronic submissions. In order to view the application package, download the PureEdge viewer (hyperlink available under "Apply for Grants" then "Apply Step 1"). The application package may be quickly accessed from https://apply.grants.gov/forms_apps_idx.html using either the CFDA number of 66.512 or Funding Opportunity Number EPA/ORD/NHEERL/MED-FY2006-06-25911. It is recommended that you "Register to Receive Notification" of announcement updates.

The actual submission of an electronic application must be made by an authorized organizational representative (AOR) of the submitting institution who is registered with Grants.gov (most individual investigators will not be eligible to submit the application). Please see <http://www.grants.gov/>, "Get Started" for further information. ***The registration process may take a week or longer to complete.*** Please check with your Sponsored Programs or equivalent office to locate your AOR and see if your institution is registered. If your institution is not currently registered, encourage your AOR to begin the process immediately.

The complete application package ***must be received by Grants.gov by no later than 6:00 pm Eastern Time*** on 06/13/2006. Electronic Applications will be date/timed stamped electronically. An e-mail will be sent by NHEERL to the Principal Investigator and the Administrative Contact to acknowledge receipt of the application and to transmit other important information. If an email acknowledgment from NHEERL (*not* support@grants.gov) has not been received within 30 days of the submission closing date, immediately contact the technical contact listed under "Agency Contacts" in this solicitation. Failure to do so may result in your application not being reviewed.

Documents 1 through 10 listed under Application Materials in Section IV.A of this announcement should appear in the "mandatory Documents" box on the grants.gov Grant Application Package page.

For documents 1-6, click on the appropriate form and then click "Open Form" below the box. The fields that must be completed will be highlighted in yellow. Optional fields and completed fields will be displayed in white. If you enter an invalid response or incomplete information in a field, you will receive an error message. When you have finished filling out each form, click "Save". When you

return to the electronic Grant Application Package page, click on the form you just completed, and then click on the box that says, “Move Form to Submission List”. This action will move the document over to the box that says, “Mandatory Completed Documents for Submission.”

For documents 7 and 8, you will need to attach electronic files. Prepare each of the documents as described in Section IV.A of the announcement and save the documents to your computer as an MS Word, PDF or WordPerfect file. When you are ready to attach your proposal to the application package, click on “Project Narrative Attachment Form”, and open the form. Click “Add Mandatory Project Narrative File”, and then attach your proposal (previously saved to your computer) using the browse window that appears. You may then click “View Mandatory Project Narrative File” to view it. Enter a brief descriptive title of your project in the space beside “Mandatory Project Narrative File Filename,” the filename should be no more than 40 characters long. If there are other attachments that you would like to submit to accompany your proposal, you may click “Add Optional Project Narrative File” and proceed as before. When you have finished attaching the necessary documents, click “Close Form”. When you return to the “Grant Application Package” page, select “Project Narrative Attachment Form” and click “Move Form to Submission List”. The form should now appear in the box that says, “Mandatory Completed Documents for Submission”.

Documents 9 and 10 are listed in the “Optional Documents” box, but *please note that these so-called “optional” documents must also be submitted as part of the application package, if applicable to your organization.* You are only required to submit document 9 – SF-LLL, Disclosure of Lobbying Activities – if your organization is involved in lobbying activities. You are required to submit document 10 – Negotiated Indirect Cost Rate Agreement – if you have included any indirect costs in your proposed budget. To attach document 10, use the “Other Attachments Form” in the “Optional Documents” box. After attaching the document, please remember to highlight the “Other Attachments Form” and click “Move Form to Submission List” in order to move the documents to the box that says, “Optional Completed Documents for Submission

Once you have finished filling out all of the forms/attachments and they appear in one of the “Completed Documents for Submission” boxes, click the “Save” button that appears at the top of the Web page. It is suggested that you save the document a second time, using a different name, since this will make it easier to submit an amended package later if necessary. Please use the following format when saving your file: “Applicant Name – FY 06 (grant category; e.g., Assoc Prog Supp) – 1st Submission” or “Applicant Name – FY 06 (grant category) – Back-up Submission.” If it becomes necessary to submit an amended package at a later date, then the name of the 2nd submission should be changed to “Applicant Name – FY 06 (grant category) – 2nd Submission.”

Once your application package has been completed and saved, send it to your AOR for submission to the U.S. EPA through Grants.gov. Please advise your AOR to close all other software programs before attempting to submit the application package through Grants.gov.

In the “Application Filing Name” box, your AOR should enter your organization’s name (abbreviate where possible), the fiscal year (e.g., FY06), and the grant category (e.g., Assoc Prog Supp). The filing name should not exceed 40 characters. From the “Grant Application Package” page, your AOR may submit the application package by clicking the “Submit” button that appears at the top of the

page. The AOR will then be asked to verify the agency and funding opportunity number for which the application package is being submitted. If problems are encountered during the submission process, the AOR should reboot his/her computer before trying to submit the application package again. [It may be necessary to turn off the computer (not just restart it) before attempting to submit the package again.] If the AOR continues to experience submission problems, he/she should contact grants.gov for assistance (Phone: 1-800-518-4726, Email: support@grants.gov). If submission problems are not quickly resolved, contact the NHEERL electronic submission support person, Craig Johnson (218) 529-5016 or johnson.craig@epa.gov.

Application packages submitted through grants.gov will be time/date stamped electronically.

C. Submission Instructions for Printed Applications

Submit a complete application including all of the documents identified in Section IV.A. of this announcement. If the application is not submitted electronically through grants.gov, it *must be* sent through regular mail, express mail, or a major courier to: **Jo Thompson, U.S. EPA, MED, 6201 Congdon Blvd. Duluth, MN 55804. Do not email or Fax the application. Electronic copies must be made available upon request.**

Because of security concerns, applications cannot be personally delivered. To be considered timely, printed applications must be received by 3:00 p.m. local time in Duluth, MN, on 06/13/2006 from the U.S. Postal Service or a major courier. If you are sending a printed application, please request a delivery receipt from the Post Office or delivery service. Applications received after the deadline will not be considered and will be returned to the submitter. Printed applications, including all documents stated in Section IV.A., must be submitted in the original with 3 copies and should be double-sided. Grant application forms can be found at <http://www.epa.gov/ogd/AppKit/application.htm>

D. Intergovernmental Review

This assistance opportunity is subject to Executive Order 12372, "Intergovernmental Review of Federal Programs." Applicants should contact their State's Single Point of Contact (SPOC) to find out how to comply with the State's process. The names and addresses of the SPOC's are listed in the Office of Management and Budget's home page at: <http://www.whitehouse.gov/omb/grants/spoc.html>.

E. Funding Restrictions

Annual increments of awards will be made by request to EPA. Funding will be contingent upon availability of funds and satisfactory performance during the first year.

F. Amendments

Amendments will be posted on this website and the due date for applications will be extended if deemed appropriate.

V. Application Review Information

Administrative Review: All applications will be subject to Administrative Review by the National REMAP coordinator to insure that all packages meet the requirements of this RFA. Proposals that do not meet the eligibility and threshold requirements stated in Section III, substantially comply with the application submission instructions and requirements set forth in Section IV, or submit applications on or before the closing date published in Section IV of this announcement will be rejected. Rejected applications will be returned to the sender without further consideration.

Relevancy Review: Proposals that are found administratively acceptable will be reviewed by ORD for relevancy to EPA's mission to support advancement of environmental science. Proposals will be rejected if they are found to lack relevance. Examples of proposals that lack relevance include:

1. Proposal is deficient technically with no chance for consideration.
2. Proposal fails to advance the objectives stated in the solicitation even if successfully performed.
3. Proposal essentially duplicates REMAP research already completed or underway. (see past and current REMAP projects at www.epa.gov/emap/remap).
4. Proposal fails to demonstrate a public purpose of support and stimulation; i.e., it implies the primary purpose is to provide direct support to the Federal government.

Ranking Criteria: Proposals that are found administratively acceptable and relevant will be forwarded to the U.S. EPA Region for which the proposal is intended. A panel of EPA scientists at each Region who have no conflict of interest with the applicants will review and rank proposals based on the following **programmatic and technical criteria**:

Past Performance Environmental Results Criteria:

- a. Extent and quality to which the applicant adequately documented and/or reported on its past progress towards achieving the expected results (i.e. Outcomes and outputs) under EPA and other Federal agency assistance agreements performed within the last 3 years, and if such progress was not being made whether or not the applicant adequately documented and/or reported why not. (Organizations that have no relevant past performance will be given a neutral rating. The Agency may contact the sponsor to corroborate the information and may review other data.)(5 points)

Programmatic Criteria:

- a. The extent to which proposed research addresses the RFA "Regional Funding Priorities identified in Section 1. (40 points)
- b. Extent to which approach considers State and Tribal needs for 305b reporting, the 303d process, restoration/remediation efforts, improved development of biological

- reference condition for establishing biocriteria and improved tools and approaches for the assessment of aquatic ecosystems. (20 points)
- c. Adequacy of the plan for transferring project data and results to Regions, States and Tribes. (10 points)
 - d. Extent to which proposed work links to existing efforts, forms collaborations with Inter-government organizations, State, Tribal and Federal partners. (10 points)
 - e. Extent to which the applicant demonstrates the technical ability to successfully carry out the proposed project based on: 1) past performance (last 3 years) in successfully completing and managing federally funded agreements of similar size, scope, and relevance to the proposed project, its history of meeting reporting requirements under federally funded agreements of similar size, scope, and relevance to the proposed project and submitting acceptable final technical reports under these agreements; 2) organizational experience and plan for timely and successfully achieving the objectives of the proposed project; And, 3) its staff expertise/qualifications, staff knowledge and resources or the ability to obtain them in order to successfully achieve the goals of the proposed project. (Organizations that have no relevant past performance will be given a neutral rating. The Agency may contact the sponsor to corroborate the information and may review other data (e.g., the EPA's Grantee Compliance Assistance Initiative database.) (15 points)

Technical Criteria:

- a. Extent to which the project objectives and hypothesis are clearly stated (10 points).
- b. Extent to which the proposed approach, including the conceptual framework, design, methods analyses, is adequately developed, integrated and appropriate to the goals of EMAP/REMAP and the research questions/hypotheses being addressed (20 points).

Environmental Results Criteria:

- a. Extent to which the applicant adequately defines a plan for tracking and measuring progress toward achieving the expected environmental outputs/outcomes. (10 points)

Each reviewer will separately score each proposal based on the extent (relevant to maximum points assigned to each criterion) to which each of the above programmatic and technical criterion are met. Reviewers will provide narrative justification for each score. The total maximum obtainable score for any one proposal would be 140 points. Proposals will be ranked by the average total scores from all the reviewers in the Region. Any proposals addressing the Regional Funding Priority for the development of Fish IBI's in Region 3 will be reviewed and ranked separately (but using the same evaluation criteria stated above) from all other proposals submitted for Region 3.

Other Factors: When two or more of the highly rated proposals receive equivalent rankings, the respective budgets will be evaluated for cost reasonableness and cost realism in order to determine

which applicant will be selected for funding recommendation. The proposal that is determined to be the most reasonable/realistic will be selected. The amount of cost sharing proposed (if any) will not result in additional points for any applicant, but will be considered in the evaluation of the reasonableness and realism of the overall budget.

Review and Selection Process:

Source Selection: U.S. EPA Regional Offices will summarize reviews of their proposals. This will include averaging the scores of each proposal reviewed and providing comment on each ranking criteria factor. All reviews will then be forwarded to MED. The top ranking proposal from each Region (2 from Region 3, see previous section) will be the proposal that is selected by the program office for recommended award based upon the combined rankings of the technical and programmatic reviews and the other factors discussed above.

The selection of a proposal by does not guarantee award. Upon selection, an ORD Scientist will be assigned as the project officer (PO). It is the PO responsibility to assure that work plans reflect shared EPA and applicant interests and include well defined commitments (environmental outputs) that foster accountability and ensure that the activities in the work plan are consistent with the statutory authority for the assistance agreement and EPA Order 5700.1, Policy for Distinguishing between Assistance and Acquisition. The project officer, through consultation with other EMAP scientists, may negotiate with the selected applicant to refine proposed methods and testing protocols, eliminate unnecessary tasks, delete unnecessary and unallowable costs and clarify outcomes and outputs. Negotiated changes are to improve the quality of the project and assure the usefulness of its products.

They do not result in material changes to the original proposal and since they are made after the selection process, they provide no leverage over other applicants. As required of assistance agreement research plans, the Project Officer will arrange to have an expert peer review performed on the negotiated work plan. The peer review will be conducted by one internal peer reviewer and 2 external reviewers. Upon acceptance of the applicant's reconciliation of peer review comments, the project officer will assemble a complete funding package in accordance with the guidance provided by EPA's Office of Grants and Debarment (www.epa.gov/ogd), along with a Funding Recommendation from the PO's Division Director who is the Decision Official. The National REMAP Coordinator and the Extramural Management Specialist at ORD's Mid-continent Ecology Division (MED) will review the package for completeness. If the funding package is complete, MED will prepare the commitment notice, apply funds and forwarded the package to the Grants Administration Division (GAD) for recommendation of award (See Section VI, Award Notices).

Rejection Factors: Applications may be rejected because they fail to comply with the administrative requirements of the RFA, they are found to lack relevancy, they are judged technically and/or programmatically unacceptable, or they are not deemed suitable for award due to other factors (if identified). EPA reserves the right to reject any or all proposals or applications and make no awards.

Anticipated Announcement and Award Dates: Award dates will vary and are dependent on expediency of negotiated work plans and peer review reconciliations (see Section VI). Applicants

must provide ORD project officers with completed reconciliations by February 1, 2007 in order to ensure timely processing of the funding package to GAD. Failure to do so, may result in loss of available funds. It is expected that awards will be made by GAD no later than June 1, 2007.

VI. Award Administration Information

Award Notices

Notice of award will be made in writing by an official in the EPA Grants Administration Division. Preliminary recommendation by the Decision Official in the Office of Research and Development does not guarantee an award will be made. Applicants are cautioned that only a grants officer can bind the Government to the expenditure of funds. No commitment on the part of EPA should be inferred from technical or budgetary discussions with an EPA Program Official. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the EPA Grants Award Official does so at their own risk.

EPA will promptly notify in writing (postal or email) those applicants whose application is rejected. An unsuccessful applicant may request a debriefing to better understand the evaluated strengths and weaknesses of its proposal and the reason for rejection if other than technical merit.

Administrative and National Policy Requirements

Regulations and OMB Coverage: Grants and agreements with institutions of higher education, hospitals, and other non-profit organizations are subject to 40 CFR Parts 30 and 40 and OMB Circular A-122 for non-profits and A-21 for institutions of higher learning.

Grants and agreements with state, local, and tribal governments are subject to 40 CFR Parts 31 and 40 and OMB Circular A-87.

Nonprofit applicants that are recommended for funding will be subject to pre-award administrative capability reviews consistent with Sections 8.b, 8.c, and 9.d of EPA Order 5700.8.

Programmatic Terms and Conditions: Terms and conditions will be negotiated with the selected recipient covering the following requirements:

It is required that projects be performed by qualified personnel. All proposals must identify any person who will assist in carrying out the project.

The authorized representative of the recipient whose proposal is selected for an award is responsible for accepting the cooperative agreement from EPA and ensuring that all cooperative agreement conditions are satisfied.

Recipients are responsible for the successful completion of the project and for complying with all reporting requirements of the cooperative agreement.

Award recipients may begin incurring allowable costs on the start date identified in the EPA cooperative agreement. Pre-award costs are allowable 90 days prior to award. However, the applicant does so at his/her own risk. Activities must be completed and funds spent within the time frames specified in the award agreement. EPA funds may be used only for the purposes set forth in the cooperative agreement and must conform to Federal cost principles contained in OMB Circular A--87; A--122; and A--21, as appropriate. Ineligible costs will be reduced from the final cooperative agreement award.

Work plans and resultant work generated under this solicitation must comply with all EPA quality assurance requirements. If a QAPP is not submitted with the application package, it must be identified as a deliverable in the Project Narrative (under Schedule, Milestones, Products, and Final Reports) and it will be listed in the terms and conditions of the Assistance Agreement. The QAPP documents the procedures necessary to assure that the project will result in high quality data. It includes, but is not limited to, sample tracking/custody procedures, Internal quality control checks and frequency, performance and systems audit procedures and frequency, preventative maintenance schedules and procedures, procedures for corrective actions, and specific procedures for assessing precision, accuracy, and completeness of data. A Quality Assurance Project Plan (QAPP) is required for all monitoring projects and must be approved prior to the collection or use of environmental data (EPA Order 5360.1A2). Instructions for preparing a QAPP can be found in *EPA QA/G-5, Guidance for Quality Assurance Project Plans*, available at (<http://www.epa.gov/quality/qs-docs/g5-final.pdf>). An acceptable QAPP shall be due within 45 days following acceptance of the award and prior to any data collection.

Award recipients must agree to make methods, models, and data resulting from this agreement accessible to the public and to EPA.

Collaboration between EPA and the recipient is allowable. The nature and extent of any collaborations will be identified in the terms and conditions of the agreement.

Disputes: Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005) which can be found at:

<http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/05-1371.htm>

Copies of these procedures may also be requested through the contacts listed in Section VII. Disputes relating to matters other than competitive selection of recipients will be resolved under 40 CFR 30.63 or 40 CFR 31.70, as applicable.

Reporting

The frequency and content of project reports will be negotiated with the applicant and will be specified in the terms and conditions of the Assistance Agreement. In general, there will be 3 types of reporting for awarded projects:

Progress Reports: The selected recipient will be required to submit progress reports at least

annually, but some Project Officers may require quarterly reports, with the first report due (90) days after the cooperative agreement is awarded to the recipient.

Performance Reports: In accordance with 40 CFR 30.51 and 31.40, recipients agree to submit performance reports with brief information on 1). A comparison of actual accomplishments with the anticipated outputs/outcomes specified in the assistance agreement work plan; 2) reasons why anticipated outputs/outcomes were not met; and 3) other pertinent information, including, when appropriate, analysis and explanation of cost overruns or high unit costs.. The recipient also agrees that it will notify EPA or problems, delays, or adverse conditions which materially impair the ability to meet the outputs/outcomes specified in the assistance agreement work plan.

Final Report: The selected recipient will be required to submit a final report within 90 calendar days of the completion of the period of performance.

VII. Agency Contact

The primary agency contact for this RFA is **Jo Thompson** at:
U. S. EPA, MED, 6201 Congdon Blvd., Duluth, MN 55804
Telephone: (218) 529-5198
Fax: (218) 529-5003
E-mail: Thompson.jo@epa.gov

If unable to reach Jo Thompson, contact Mr. Craig Johnson at:
U. S. EPA, MED, 6201 Congdon Blvd., Duluth, MN 55804
Telephone: (218) 529-5016
Fax: (218) 529-5003
E-mail: Johnson.craig@epa.gov

VIII. Other Information

Pre-proposal/Application Assistance and Communications: In accordance with EPA's Assistance Agreement Competition Policy (EPA Order 5700.5A1), EPA staff will not meet with individual applicants to discuss draft proposals, provide informal comments on draft proposals, or provide advice to applicants on how to respond to ranking criteria. Applicants are responsible for the contents of their applications/proposals. However, EPA will respond to questions in writing from individual applicants regarding threshold eligibility criteria, administrative issues related to the submission of the proposal, and requests for clarification about the announcement.

Questions: Questions should be submitted in writing by (05/03/2006). Do not attempt to seek information regarding this RFA from any source other than those identified in Section VII as the information provided may be erroneous. Questions that identify erroneous information or information in the RFA that needs clarification for all potential applicants will be answered via an amendment to this RFA which will be posted on www.grants.gov. Visit the REMAP website (www.epa.gov/emap/remap) frequently for news about the RFA.

Confidentiality: In accordance with 40 CFR 2.203, applicants may claim all or a portion of the application/proposal as confidential business information (for example, hypotheses or methodologies contained in the research narrative that the applicant wishes to protect from possible public disclosure). EPA will evaluate confidentiality claims in accordance with 40 CFR Part 2. Applicants must clearly mark applications/proposals or portions of applications/proposals they claim as confidential. If no claim of confidentiality is made, the EPA is not required to make an inquiry to the applicant otherwise required by 40 CFR 2.204(c)(2) prior to disclosure.

Data Access and Information Release: The Office of Management and Budget (OMB) Circular A-110 has been revised to provide public access to research data through the Freedom of Information Act (FOIA) under some circumstances. Data that are (1) first produced in a project that is supported in whole or in part with Federal funds and (2) cited publicly and officially by a Federal agency in support of an action that has the force and effect of law (i.e., a regulation) may be accessed through FOIA. If such data are requested by the public, the EPA must ask for it, and the grantee must submit it, in accordance with A-110 and EPA regulations at 40 C.F.R. 30.36.

Geospatial Information: It is anticipated that the agreement that is awarded will involve or relate to geospatial information. In compliance with Executive Order 12906, REMAP data is made available for use throughout all levels of government, the private and non-profit sectors, and the academic community. The goal of this infrastructure is to reduce duplication of effort among agencies, improve quality and reduce costs related to geographic information, to make geographic data more accessible to the public, to increase the benefits of using available data, and to establish key partnerships with states, counties, cities, tribal nations, academia and the private sector to increase data availability. Further information regarding geospatial information may be obtained by viewing the following website: <http://www.fgdc.gov/nsdi/nsdi.html>.

Animal and Human Subject Research: Research projects that involve animals will be subject to the Animal Welfare Act of 1966 (P.L. 89-544), as amended, 7 U.S.C. 2131-2156. Recipients agree to abide by the “U.S. Government Principles for the Utilization and Care of Vertebrate Animals used in Testing, Research, and Training”. (Federal Register 50(97): 20864-20865. May 20, 1985). The nine principles can be viewed at: <http://www.nal.usda.gov/awic/pubs/IACUC/vert.htm>. For additional information about the principles, the recipient should consult the *Guide for Care and Use of Laboratory Animals*, prepared by the Institute of Laboratory Animal Resources, National Research Council and can be accessed at: <http://www.nap.edu/readingroom/books/labrats/>. Vertebrate animals include cold-blood organisms such as fish and amphibians. Recipients who propose to conduct research on human subjects must agree to meet all of the EPA requirements under 40 CFR 26, referred to as the “Common Rule”. If the proposed project involves human or animal testing studies, including field collections, please indicate it on a separate sheet of paper.

DUNS Number: Grant applicants are required to provide a Dun and Bradstreet (D&B), Data Universal Numbering System (DUNS) number when applying for Federal grants or cooperative agreements. OMB has determined that there is a need for improved statistical reporting of Federal grants and cooperative agreements. Use of the DUNS number government-wide will provide a means

to identify entities receiving those awards and their business relationships. The identifier will be used for tracking purposes, and to validate address and point of contact information.

A DUNS number will be required whether an applicant is submitting a printed application or using the government-wide electronic portal (Grants.gov). The DUNS number will supplement other identifiers required by statute or regulation, such as tax identification numbers. Organizations can receive a DUNS number in one day, at no cost, by calling the dedicated toll-free DUNS Number request line at 1-866-705- 5711. Individuals who would personally receive a grant or cooperative agreement award from the Federal government apart from any business or non-profit organization they may operate are exempt from this requirement. The website where an organization can obtain a DUNS number is: <http://www.dnb.com>. This takes 30 business days and there is no cost unless the organization requests expedited (1-day) processing, which includes a fee of \$40.